October 15. YEAR 1915

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BERNARD J. CIGRAND, M. S., D. D. S.
Editor & Publisher & Proprietor.

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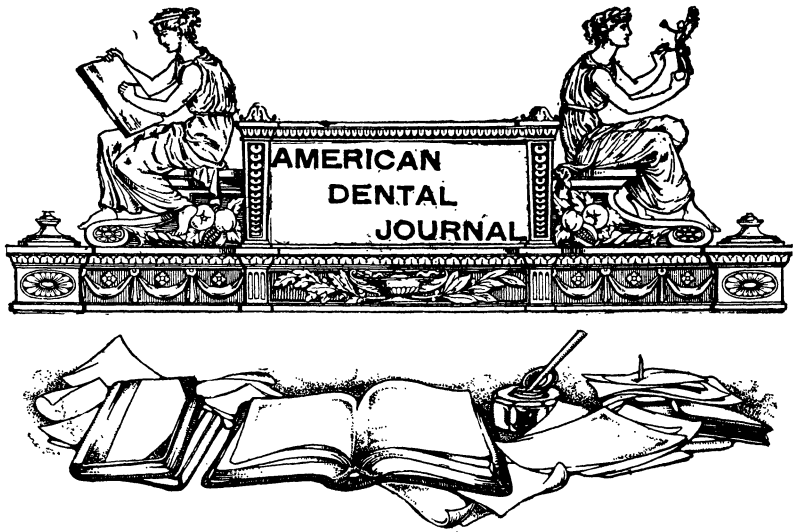


DR. BERNARD J. CIGRAND
EDITOR * * PUBLISHER * * PROPRIETOR
ENTERED AS SECOND-CLASS MATTER AT BATAVIA, ILL.

LEGAL MATTERS OF A DENTAL NATURE

The state of California has just been given a decision, relative to the new dental law, which will be of interest to all other states having similar dental registration fees for practitioners. And inasmuch as we are hearing the rumblings of similar complaints in Illinois and a few other states the opinion of the District Court of Appeals will be interesting.

The license renewal feature of the California dental law was disturbing some of the profession, and a case went through the roller, and hence the legal grist of the court. Dr. E. R. Victor, of Bakersfield, California, put the law to a test, and it concerns all dentists.

The California law practically stated that "no dentist shall be exempt from paying an annual renewal license fee of $2; and that the Board of Dental Examiners shall be empowered to

grant annual licenses to those who have satisfactorily passed the professional examination as conducted by the board; and, furthermore, who have satisfied such other requirements as are required by law, upon the payment of an annual fee of $2.

"Section 14 of the amended enactment stipulates that the failure to pay the annual fee by the holder of a license shall nullify the original issue of that license; and before he can again practice dentistry in this state shall make a new application therefor, as in the first instance, and pay the regular fee of $25 therefor; except that he shall not be required to submit to any examination."

The constitutionality and validity of the annual renewal license requirement of the law have been questioned and attacked upon several occasions.

But the court rendered its decision, and according to Dr. Julio Endelman, who has followed the case, "the decision of the court upholds the constitutionality of the act, and stipulates that the license renewal amendment affects and applies to every person practicing dentistry in the state, regardless of whether the holder of a license was given the right to practice before or after the passage of the act containing the two-dollar-annual-renewal-license provision.

"The decision of the District Court of Appeals, as expressed in the opinion written by Judge Shaw, is of greater significance to the profession of this state than the casual observer might possibly gather, because it renders possible the carrying into effect of the true purpose of the dental act—namely, the safeguarding of the public health by insuring the better education of dentists, and the regulation of the practice of dentistry, through the agency of those state officers who together constitute the Board of Dental Examiners."

The new dental law of Arkansas has this splendid section as the definite answer to the question shall dentists be permitted to write prescriptions: "Druggists may fill dentists' prescriptions. Legally licensed druggists of this state may fill prescriptions of legally licensed dentists of this state for any drug necessary in the practice of dentistry."

NEW LIGHT—NEW LAWS

It certainly is gratifying to state that Illinois goes on an "exchange basis," as indicated by section 11 of the recently amended dental act, and made a law by the signature of Gov. Edward F. Dunne. It reads:

"Any dentist who has been lawfully licensed to practice in another state or territory which has and maintains a standard for the practice of dentistry or dental surgery equal to that now maintained in this state, and who has been lawfully and continuously engaged in the practice of dentistry for five years or more immediately before filing his application to practice in this state, and who shall deposit in person with the secretary of the board a duly attested certificate from the examining board of the state or territory in which he is registered, certifying to the fact of his registration, and of his being a person of good moral character and of professional attainments, may, upon the payment of a fee of $25, and after a satisfactory practical examination demonstrating his proficiency, be granted a license to practice dentistry in this state without being required to take an examination in theory. Provided, however, that no license shall be issued to any such applicant, unless the state or territory from which such certificate has been granted to such applicant shall have extended a like privilege to engage in the practice of dentistry within its own borders to dentists heretofore or hereafter licensed by this state and removing to such other state; and, provided further, that the Illinois State Board of Dental Examiners shall have power to enter into reciprocal relations with similar boards of other states whose laws are practically identical with the provisions of this act."

The states are gradually realizing the importance of curbing the sale of dangerous drugs, and it will be news to Illinois dentists to read how they are now tied up to the pharmacy board by Gov. Dunne's signature to a wise bill. A digest of the law is as follows:

"The new Illinois law imposes a penalty of from $50 to $200 for the second and subsequent violations of the pharmacy law, and prohibits the sale by other than registered pharmacists,

licensed physicians, dentists or veterinarians, of any poisons or poisonous substances, opium, coca leaves or any compound, salt (derivative or preparation thereof, and imposes a penalty of $50 to $100 on any person making false representation to procure registration; prohibits the sale of opium, coca leaves, or any compound or derivative, by any person, except upon prescriptions of licensed physicians, dentists or veterinarians. Notes certain exceptions to the application of the act, and makes it unlawful for any licensed physician or dentist to prescribe for any habitual drug user any of the drugs hereinbefore mentioned, except as medicine, and not for the purpose of evading any of the provisions of this act; but in all cases shall report to the Board of Pharmacy in writing the name of every person being so treated, and the date such treatment began."

It will be a cautionary measure to dentists to know that the Supreme Court has rendered an opinion that dentists, surgeons, physicians and pharmacists, in order to collect any bill, must have complied with the state law regulating such practice; and if renewal fees for license has been overlooked or neglected, it makes his bill against patron or patient illegal and non-collectible.

It pays to keep posted on all these matters. Do not forget that the people of the state regulate dentistry by and with the aid of the profession; but once the bill becomes a law, see to it that you as a dentist are eager and loyal to its purpose of protecting the public and raising the standard of the practice of dentistry.

COMMENT

WE are pleased to again give our readers one of Dr. Hitchcock's carvings. Dr. Hitchcock, of Oswego, New York, has produced some artistic results.

To those who send one dollar now we will send THE AMERICAN DENTAL JOURNAL fifteen months. This applies on renewed as well as new subscriptions.

ORIGINAL CONTRIBUTIONS

AN INTERESTING SURVEY

By L. P. Bethel, M.D., D.D.S.

[Editor Bethel tells a few plain facts. It will be refreshing to some to know that he hits the nail on the head.—Editor.]

Members of the Central Ohio Dental Society, a component of the State Dental Society, and comprising seven counties, finding that there was a wide variance in fees and other conditions existing in their section of the state, decided to make a survey of conditions with the idea of placing the practice of dentistry on a more equable basis.

The survey committee framed a list of questions relating to conditions in general and fees in particular. The members were requested to answer questions correctly or not at all, and not to sign their names. From a membership of fifty-four there were thirty-one replies.

The survey showed that for every kind of operative work some members were charging only one-half, one-third, one-fourth, and even one-fifth, of what others were charging. In prosthetic dentistry, one-half, two-thirds, three-fourths. With the summary of the survey as a basis, the committee made a minimum fee schedule, which later was adopted by the society.

The survey showed the average yearly income for the past five years to be $2,550. Expenses, including office rent (at an average of $11 per month), general office expense, cost of supplies (at 16½ per cent interest on investment and equipment), amounted $936, leaving an average net yearly income of $1,564, out of a practice amounting to $2,500.

Since this subject was brought before the society (November, 1913) many members have been raising their fees. They declare that they seldom have a "kick." One member stated that in July, 1914, he had received $300 more than he would

have received for the same amount of work the year previous. Here are a few of the general questions asked: Have you an assistant?—8 yes, 22 no. Is dentistry hard on your health?—21 yes, 7 no. Do you think physicians readily recognize alveolar abscess?—3 yes, 25 no. Do you consider that your skill and the value of your services have increased since you began practice?—30 yes. Do you charge the same fees you did at first?—3 yes, 27 no. Do you think you get the fees you should for your services?—2 yes, 22 no, 6 partly. Should we charge for examinations?—20 yes, 8 no. Do you own property?—16 yes, 14 no. Do you own an automobile?—6 yes, 24 no. Would you like to have the State Dental Society make a survey similar to this?—28 yes, 1 no. Would you grasp an opportunity to get out of dentistry into some other business?—22 yes, 6 no.

It would be interesting to have the state society make a similar survey, for it would point out the true conditions existing throughout the state; and if state societies in other states would do likewise, it would do more than anything previously undertaken to show the real condition of dental practice throughout the United States. It would also indicate a remedy for deficiencies that might exist in some sections. It seems as though this is a matter of such importance that it should at least receive consideration from our state organization.

A DENTAL CRITIQUE, WITH SOME SUGGESTIONS

By Dr. B. J. Cigrand, Batavia, Ill.

[Continued from page 521, September issue.]

[This article appeared in the 1915 issue of *The Dental Review*. The editor, Dr. C. N. Johnson, had these engravings made from my charts, and I deeply appreciate the kindness of *The Review*.—Editor.]

It frequently happens that occlusal surfaces of molars and bicuspids are not deeply decayed, but are surface-disturbed by either disease or medicines; and here I trim off with stones of various grades of fineness, following up with sandpaper, and then I model the occlusal with wax, and either by the swaged or casted method restore the occlusal surface. These restorations

I then fasten into the tooth by means of the intra-dental band system (which I gave the profession some years ago, and which has successfully served not only myself, but hundreds of practitioners throughout the world). By this method you need not devitalize the pulp, as the anchorage is about (and not over or against) the pulp. The anchorage may also be made by using the half-circle band, the round part fitting into the natural teeth and the other side adapted to the interproximal surfaces. (Figure XIII.)

In the past ten years I have completely discarded the use of gutta-percha in the setting of crowns or bridges, and avoid using it even in root filling, as I have examined this porous, unreliable and bacteria-harboring material. Its odor, when removed from a cavity or taken from the post end of a crown set with it, should be sufficient warning to any practitioner that it is unfit, unreliable and useless in any manner, except possibly as a temporary filling, and then the term "temporary" should mean not to exceed a month. The microscope, as well as your olfactory nerve, will convince you that I am right in discarding gutta-percha from the mouth.

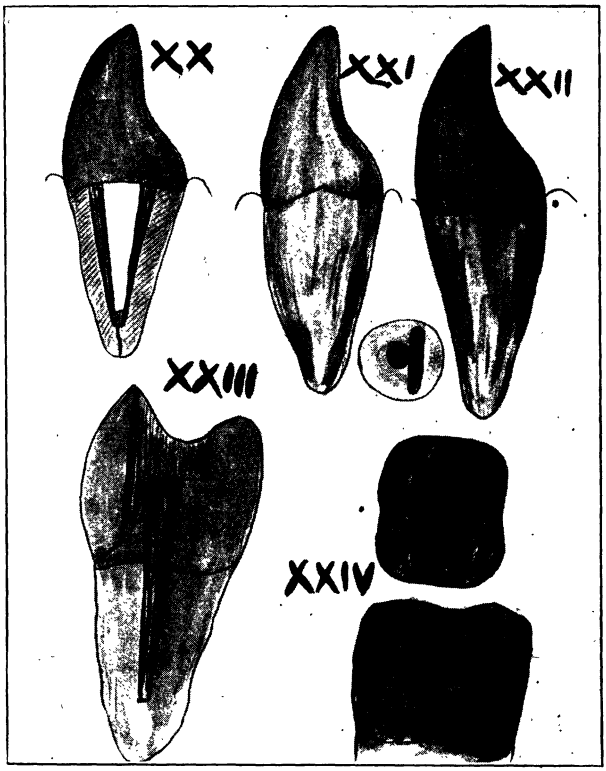
Even cement, too, is not free from some of the objections I have just enumerated; for its porosity is an ever present danger where it is exposed to the fluids of the mouth. Under the microscope the huge caverns and channels make one think of the Mammoth Cave, Kentucky. It, too, is not without its shortcomings in the setting of crowns and bridges; but I have overcome this porosity and lack of resistance, and made the cement more dense and compact, by transforming it into a concrete, which I will demonstrate to you this evening.*

Practitioners still continue setting a crown with a thin, short metallic post, and depend on the bulk of the cement to fill in the space in the canal, trusting that the cement will hold the crown. (Figure XX.)

After a few months—or years at most—the cement has deteriorated and the case or crown is loose. My method is to ream out the canal, fit the crown and post of canal length,

*This paper was read as guest of the Rockford Dental Society.

place about the post a bit of wax and get an accurate impression of the canal; then remove, and invest in cast investment material; free the case of wax, and cast the metal about the post, and this will give you a metal post of the same circumference and length as the canal. It will fit so absolutely that even without the aid of cement it would remain in place; but



add a trifle of cement of the consistency of cream and press it into position, and you have properly anchored the crown or bridge. Cement, like glue, is not strong or durable in bulk; it must be in film form, as I here describe, if you wish tenacity and durability in cement. To keep the crown from tilting for-

ward or fracturing the root I trim, as in Figues XXI and XXII, or solder a cross-bar on the post.

These are a few of the hundreds of practical points which twenty-five years of practice and teaching have proven of value to myself and pupils, and I sincerely recommend them to your consideration; but trust you will personally experiment and calculate when and how to apply my suggestions, and with a measure of caution and a degree of careful manipulation you will learn that some of these items will possibly be of service to either you or your patrons.

NEW THOUGHT ON PYORRHOEA

By Dr. W. H. McDonald, D.D.S., L.D.S.

[There is food for thought in what Dr. McDonald, of Toronto, states. Not all is said nor solved. What have you to say in the matter?—Editor.]

In the etiology of the condition the following statements may be safely made: Any irritant of whatever nature which impairs the integrity and continuity of the gingival gum margin may cause pyorrhœa alveolaris, and without this impairment the conditions will not be established. Systemic conditions, or a constitutional diathesis without local irritation, do not destroy the integrity of the gingival border. The degree of resistance to irritants differs much in different individuals, and it also differs in the different climates. An irritant which will cause an inflammation and bring on an attack of pyorrhœa in one case will be thrown off by another whose resistance is high for this particular organism. This may be said not only of the bacteria which causes pyorrhœa, but of almost any form of bacteria; for example, the bacillus of tetanus is quite common in the ground and in various places—but how many of us ever suffer from lock-jaw? We must come in contact with it quite frequently, but very few suffer from the dreadful lock-jaw. Pyorrhœa may be either hereditary or acquired. By hereditary predisposition we mean that there is abnormal weakness of resistance transmitted from the father or the mother to the child. Pyorrhœa is noticed by the leading men to often affect

each member of a family, and then the children, and we must conclude from this that it is due to a weakness in the gingival tissue which is hereditary. We can not say that this disease is always hereditary, for we have many examples of acquired pyorrhœa. This may be due to lack of nourishment to the tissue of the gum, which has lowered the resistance to the irritant, and in doing so has made it an easy matter for the invasion of bacteria when the membrane is slightly injured by local irritation.

Salivary calculus is thought to be the cause of at least 50 per cent of the cases of pyorrhœa. The calcareous salts of the saliva are deposited upon the neck of the tooth, and, of course, a local irritation is set up. This deposit may occur to some extent in some individuals and not cause pyorrhœa, while in others a smaller amount of it will produce a serious attack. There is also a form of gum recession which has no inflammation, and therefore can not be termed pyorrhœa. The gum is in a perfectly healthy condition, but has large deposits of calculus about the neck. Of course, this may through time lead to local irritation. Here the resistance must be high. One of the most common places of calcareous deposits is on the lingual of the lower anterior teeth, as it is quite difficult to reach this particular part with a tooth-brush.

Mouth breathing may also be considered a cause of pyorrhœa. The gingival margin of the gum, particularly in the anterior part of the mouth, is dried by the air currents, and thus its function is interfered with. There is not proper nutrition to the membrane, and, of course, the resistance is considerably lowered. Slight local irritation may allow the organism to proceed.

INVESTIGATION

DISINFECTING A TOOTH WITH DEAD PULP

By Dr. E. Dunn

An easy method of disinfecting a tooth with a dead pulp, and to reduce the severe pain in inflammation due to acute periodontitis, when the pulp chamber and canals are not filled, consists of the following: The cavity is washed out and dried. A pledget of cotton is saturated with tincture of iodine, and to it a large ball burnisher made quite red-hot is applied. This will cause the vapor of the iodine to permeate the root canals; and if applied three times a day, should reduce the acute pain, and also stay the inflammatory process—if this has not advanced too far. The same method can be used to disinfect roots before opening, adding a very small quantity of formaldehyde solution to the iodine.

HYPERSENSITIVE DENTINE

By G. M. Allen, of Euroa

During the spare time at my disposal I have been devoting my energies to the elucidation of that phenomenon, "hypersensitive dentine," which every practitioner has to contend with in the course of his conservative work.

I have found that this hypersensitive condition is most marked in those patients who present marked "cachectic" symptoms. I have endeavored (per the medium of the microscope) to trace the varying conditions that are found connected with this pathologic condition.

I have prepared and stained sections of teeth that have presented varying degrees of hypersensitiveness. On comparison one notes the varying changes that appear in the tubuli. From the membrana eboris numerous fibrillæ make their appear-

ance, radiating outward toward the periphery of the dentine. I have found that the more numerout these fibrillæ are in like ratio must we expect an increased hypersensitive condition of the dentine. In addition to these fibrillæ or filaments, we are struck with the semi-translucent appearance of tubuli. Such are the microscopic conditions which present themselves when examining the "section" simply "stained" and mounted in Farrant's medium.

On introducing under great pressure an aniline dye throughout the whole of the tooth structure, with a syringe specially constructed, and then preparing the section in the usual way, we find on microscopic examination of 750 diameters that profound changes have taken place in the configuration of the tubuli. Radiating from the periphery toward the pulp, we find the dental fibrils much distorted, some containing a superabundance of the "injected" material; others, again, are only slightly affected. The fibrils so affected to the greatest extent are those which correspond to the tubuli, containing the greatest number of fibrils in simply the stained specimens. It is obvious, however, that when we find a dentinal tubuli presenting within itself an inter-tubular substance in appearance to one or more well-defined fibrillæ, then we may be certain that in the injected specimen coinciding with the same we shall find that the fibrillæ have taken the stain readily and communicated to the pulp the injected material. When a tubuli does not present that defined filamenteous appearance, then we find that the said dentine did not possess any supersensitive conditions. All the tubuli, on microscopic examination, will be found to have become impregnated with the stain for varying distances from the periphery, and the stain will appear uniform where the tubuli are placed in juxtaposition with the enamel fibers. At present I feel convinced that we shall have to look to those tubuli that possess an irregular number of fibrillæ within themselves for that hypersensitive condition frequently met with in practice.

I am only in the elementary stages of my examination regarding this condition. I hope, however, in the near future to be able to prove definitely the results of further inquiries into this matter.

WHY ARABS SO FREQUENTLY CLEAN THEIR TEETH

[Editorial Le Journal Dentaire Belge.]

According to their religion, Musselmans must, before prayers, give themselves up to ablutions of the entire body in order to purify it. The care of the mouth is a part of these ablutions.

Tradition relates that the prophet cleaned his mouth after meals with a stick of licorice wood which had previously been masticated, so that one of the extremities consisted only of woody fibers, which formed a kind of brush and was used as a tooth-brush. If, at the time of his ablutions, the Arab had not ready those substances with which he is accustomed to clean his teeth, he simply rinsed his mouth; and if he had no water he confined himself to simulating the ablution.

Here is an extract from the Arab precepts as regards hygiene (taken from the philosophy of Sidi Khalil): "It is necessary that every Wednesday a man should perform ten things revealed by our Father Abraham; or at least some of them if he is not able to accomplish all. One of these ten instructions is to use souak for the mouth."

Souak is used by the Arabs for the care of the mouth; but some, especially among the women, like to use this drug for cosmetic purposes. The Arab woman proceeds in this way: She takes a fragment of bark three or four centimeters long and a centimeter broad, and she chews this substance for half an hour, after which she uses it to rub the teeth and gums. Under the action of this product the teeth become white and the gums take on a beautiful red color. Certain Arab women, in order to perfume the breath and to complete this cleansing of the mouth, masticate for a portion of the day a resinous gum which is known in Tunis by the name of elloubane. This resinous gum (of which we have received a specimen) is no other than olibanum (frankincense).

Souak is used in many of the countries of Northern Africa, such as Tunis, Algeria, Egypt, Asia Minor, etc. In all these countries souak is an important article of commerce. Its cost

varies from frs. 3 to frs. 8 a kilo. Arabs chiefly use it; but other people living in contact with them, having learned to appreciate its advantages, also make use of it.

Throughout the east betel is used—especially as a masticatory. It is a complex product, whose principal constituent is the leaf of a climbing plant of the family of piperaceae mixed with lime and areca nut. This substance has a certain physiological action which orientals can not dispense with without bringing on cachexia.

Among the Senegalese sotiou is used. It is a real natural tooth-brush. This brush, or "sotiou," is nothing more than a little stump of a branch or root got from certain trees or bushes of the country. Its length is usually 10 to 15 centimeters, and it is about as thick as a pencil. In order to make a sotiou the bark is removed from a part of the little branch and its end is chewed until it is quite clean; so that one has a kind of brush with very short (about 2 centimeters) but very stiff bristles, with which the teeth are vigorously rubbed from right to left and from above downward.

A great number of trees furnish this brush. They chiefly belong to the family of leguminosæ, examples of which are acacias, tamarinds.

The use of this preliminary tooth-brush has spread throughout Central Africa, even to the western side, and is found in Nigeria, the Congo.

The Malgaches take great care of their teeth, and use a powder made from rice, which is calcined and pounded. The negroes of the Antilles also use for the preservation of their dentition little branches and roots of certain plants.

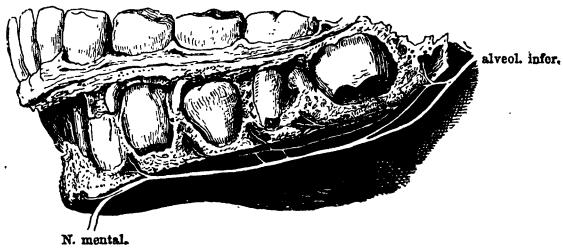
This brief review shows how the custom of some still savage and half-civilized nations leads one to think that they all take the greatest care of their teeth, and that the cleanliness of the mouth and teeth appears instinctive among these primitive races. It might be added that it is disquieting that it is not always so among civilized people.

DENTAL DEVELOPMENT AND THE SKULL

The growth of the jaws depends upon the growth of the dental germs. Experiments have been made by removing from young dogs the dental germs on one side. At the end of several months the permanent germs on the same side were also removed. The bones of the head were examined a year later, and showed:

1. A modification in the direction of growth, the deviation being in the sagittal plane.

2. The greatest growth in heighth of the skull was on the side from which the dental germs were removed.

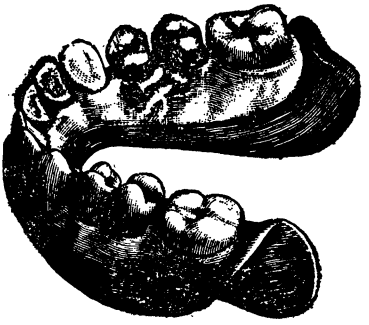


3. A lessened development of the zygomatic arch and a thinning of the orbital floor, and in general diminished growth in width on the side operated upon.

From this it may be concluded that the teeth, owing to their tendency to develop toward the outer side, control the growth in width of the skull. A man who is almost edentulous from birth presents a narrowed maxilla. Starting from this point of view, the following facts may be explained: Diversity in the form of palate; abnormal arrangement of the teeth, with a raised and narrow palate; narrowness of nose, accompanied by adenoids, lengthening of the alveolar process and enlarged palate.—*Le Journal Dentaire Belge.*

DENTURES FOR A FLAT LOWER JAW

It is a constant wonder to myself, after twelve years' use of a denture on a flat narrow lower jaw like mine, that they can be used as successfully as my own is. Nothing to hold it in place, no adhesion, and, as absorption has been so complete, the muscles are attached to the margins of the jaw, so the plate can not be extended over the lingual side at all, as it would be lifted by the tongue. In former years I placed flanges along the side of the bicuspids and molars, to fill out the cheeks, not



supposing that it was of any further use. In later years, from experience with my own set, I have found these useful in a large measure, as the cheeks lie over them and help to hold the plate in place; but it is important to know just how to place them. If they are placed at the margin of the plate the muscles lift the plate. Place them midway between the margin and the necks of the teeth, hollowed out a little—*Dr. L. P. Haskell, Chicago.*

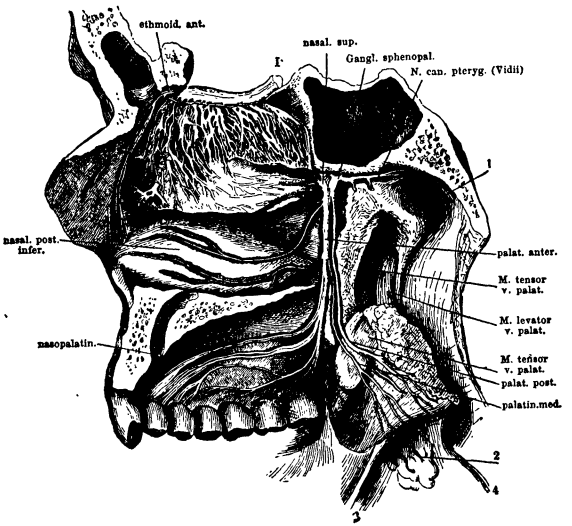
FACIAL NEURALGIA AND FACIAL HEMISPASM

[The medical world is gradually opening its eyes to the service of dentistry. Can we awaken to the vast field before us?—EDITOR.]

The following case has been reported in *The Medical Press and Circular* by a writer who modestly subscribes himself "A Hospital Dentist":

"In the most admirable and lucid clinical lecture by Dr. M.

J. Sicard, reported in your current issue, he emphasizes the uncertainty of the etiological data available in the differential maladies which he discusses, and I notice that he does not allude to dental disease as a factor in causation—or, perhaps, as the sole cause of the symptoms. This cause is very often overlooked. Patients frequently go on for prolonged periods suffering neuralgic pain indistinguishable from that arising from any other variety of peripheral irritation, whilst the origin of the malady lies entirely in morbid dental conditions. In cases of facial neuralgia it is never sufficient to take the patient's



statement that the teeth never ache, or that he has no decayed teeth. Not only must the mouth be examined, but every tooth must be explored with dental probe and mirror; roots buried in the gums must be sought for, and the signs of dental exostosis and necrosis in decayed or stopped teeth must be looked for. Disease of particular teeth is sometimes revealed by percussion. I am constantly seeing cases which forcibly illustrate the need for this procedure, and I have seen one such today. This was a lady, aged 35. She had been suffering for months from neuralgia in the left ear and temple. The pain was worst at night."

HOW TO HOLD COTTON ON A SMOOTH BROACH

[Dr. Carl D. Lucas, of Indianapolis, gives us a good point and credits its source.—EDITOR.]

There is one point in technique with reference to the treatment of pulp canals which I learned on a trip to New Orleans; a point I consider well worth the expense of the trip a great many times over. It had been my custom to dry pulp canals by twisting cotton fiber upon a spiral broach. Occasionally it was almost impossible to get the cotton off of the broach; consequently I lost much time. I tried many times to use a smooth broach as an applicator for medicaments, by twisting cotton upon the broach, but I could not get it to hold. For instance, when I wished to apply a drug in the canals, and pump it down toward the ends of the roots, the cotton would become loosened. It is an easy matter to attach cotton to a smooth broach, and all there is to it is to draw the smooth broach across a piece of sterile beeswax before twisting the fiber upon the broach. Any amount of cotton may be firmly attached to the broach, and it will not become loosened in pumping the drug into the canals. That little point in technique has saved many hours of time for me. It has materially assisted me in drying canals, because I am enabled to use a smooth broach of exceedingly small diameter, and twist a few or as many fibers as necessary upon it, and come more nearly approaching the apex of the roots with the dry cotton fibers in drying the canals than by any other method.

DEATH FROM BLOOD-POISONING AFTER EXTRACTION

A master baker (Otto Muller, of Lippoldsberg), having had several teeth extracted at the Gottinger clinic, was warned neither to smoke nor drink alcohol until the mouth had healed. Nevertheless, shortly after the operation he smoked a cigar. Severe pain began during the same evening. He was taken to the clinic once more, but it was too late. He died the next day of blood-poisoning.—*Zahntechnische Rundschau.*

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Gold Cylinders, ½ oz.	13.25
Gold Cylinders, per oz.	26.50
14K Solder, per dwt.	.65
16K Solder, per dwt.	.75
18K Solder, per dwt.	.85
20K Solder, per dwt.	.95
22K Solder, per dwt.	1.00
Coin Solder	.95
Silver Solder, per oz.	.90
18K Gold Plate, per dwt.	.85
20K Gold Plate, per dwt.	.95
22K Gold Plate, per dwt.	1.05
Coin Gold Plate, per dwt.	1.02
23K Gold Plate, per dwt.	$1.08
24K Gold Plate, per dwt.	1.10
Crown Metal, per dwt.	1.80
Clasp Metal, per dwt.	1.10
Clasp Wire, per dwt.	1.15
18K Gold Wire, per dwt.	.98
20K Gold Wire, per dwt.	1.00
Platinum Sheet	Market Price
Platinum Foil, for Inlay Work	Market Price
Platinum Iridio Wire	Market Price
Pure Silver	Market Price
Pure Zinc, per oz.	.10
Pure Tin, per oz.	.07
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BATAVIA, ILLINOIS or CHICAGO, ILLINOIS

THE DENTAL SUMMARY

The Magazine That Helps

Vol. XXXII SEPTEMBER, 1912 No. 9

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The Ohio State Dental Society
The Michigan State Dental Society
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The Kentucky State Dental Society
The Louisiana State Dental Society
The West Virginia State Dental Society
The Northern Ohio Dental Society
The Northern Indiana Dental Association
The Eastern Indiana Dental Society
The Southwestern Michigan Dental Society
Odontological Society of Western Pennsylvania
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and Several Local Dental Societies

Editorial Office; 1255 Neil Avenue, Columbus, Ohio
L. P. BETHEL, M. D., D. D. S., Editor-in-Chief.

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He writes that he has purchased the *American Dental Journal* and expects to conduct it as an independent journal, free from all "entangling alliances" with trade or other interests, under the following declaration of principles:

"Devoted to advancing the art and science of dentistry;
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"Supporting the State Boards in executing dental laws;
"Lending assistance to worthy and ethical practitioners;
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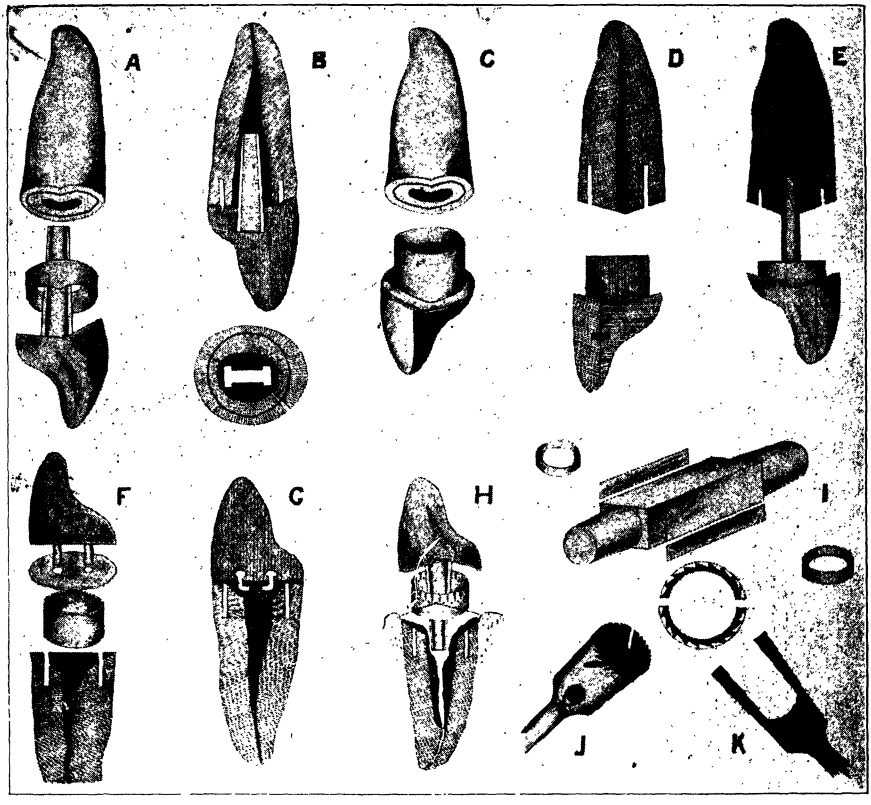

The above engraving illustrates the several uses of the Intra-Dental Band, as given in a clinic at the Tenth Anniversary celebration of the Odontographic Society of Chicago. Papers on this method were read at the Tri-Union Dental Meeting (Maryland, Washington, D. C., and Virginia) at Baltimore, June 3, 1898. Papers and clinics given at Illinois and Iowa State and Dental Societies.

Figs. A and B—Logan Crown, with Intra-Dental Band.
Figs. C and D—New crown, with band acting as a post
Fig. E—Richmond crown, with Intra-Dental Band.
Figs. F and G—New porcelain crown, held by Intra Dental Band.
Fig. H—Badly decayed root, with Intra-Dental Band.
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